PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Rainwater Wildlife Area Operations & Maintenance

BPA project number: 20082

Contract renewal date (mm/yyyy): 1/2000 Multiple actions?

Business name of agency, institution or organization requesting funding

Confederated Tribes of the Umatilla Indian Reservation

Business acronym (if appropriate) CTUIR

Proposal contact person or principal investigator:

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NPPC Program Measure Number(s) which this project addresses

7.6.A, 7.6B, 7.6C, 7.6D, 11.3A, 11.3D

FWS/NMFS Biological Opinion Number(s) which this project addresses $\ensuremath{\mathrm{N/A}}$

Other planning document references

- 1. CTUIR Wildlife Mitigation Plan for the John Day and McNary Dams, CTUIR, October 1997.
- 2. Wildlife Mitigation Program, Final Environmental Impact Statement and Record of Decision, DOE/EIS-0246, June 1997.
- 3. Guidelines for Enhancement, Operation, and Maintenance Activities for Wildlife Mitigation Projects, CBFWA Wildlife Managers, June 1998.

Short description

Protect, enhance, and mitigate wildlife habitat impacted by McNary and John Day hydroelectric projects. Rainwater Wildlife Area developed as a Columbia Basin Wildlife Mitigation Project under Washington Wildlife Mitigation Agreement (BPA et al., 1993).

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Black-capped chickadee, downy woodpecker, yellow warbler, great blue heron, mink, spotted sandpiper, western meadowlark, California quail; (mule deer, blue grouse-potential evaluation spp.); dual benefits for fish (bull trout, summer steelhead).

Section 2. Sorting and evaluation

Subbasin

Lower Mid-Columbia, Walla Walla River Basin, South Fork Touchet River

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
	If your project fits either of	
Mark one or more	these processes, mark one	
caucus	or both	Mark one or more categories
☐ Anadromous	☐ Multi-year (milestone-	☐ Watershed councils/model
fish	based evaluation)	watersheds
Resident fish	☐ Watershed project	☐ Information dissemination
⊠ Wildlife	evaluation	Operation & maintenance
		☐ New construction
		Research & monitoring
		☐ Implementation & management
		Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
9604601	Walla Walla Basin Fish Habitat	Project 9604601 includes funding
	Enhancement (CTUIR)	request for anadromous fish habitat enhancement/restoration activities on
		Rainwater Wildlife Area.
		Ramwater Whame Area.

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?
1998	Land Acquistion (8,441 acres) completed	Milestone: Habitat Protection
	9/98	through fee title acquistion
		(riparian/wetland, upland native
		grassland and forested cover types)
1998	Interim Property Management Plan	Milestone: Developed,
	Developed & Implementated (Public Use	implemented, and began
	Regulations, Access & Travel Plan)	administration of interim
		management designed to protect
		resources/maintain options until
		comprehensive management plan is
		completed.
1998	Initiated Public Involvement for	Milestone: Initiated
	Management Planning Process -	public/stakeholder
	established stakeholder advisory	involvement/scoping effort. Public
	committee	involvement in management plan
		development process necessary to
	Initiated HEP Evaluation to be completed	incorporate stakeholders
	in 1999	views/values into property
		management plan framework
	Inditiated Development of MOA with	
	WDFW	
1999	Comprehensive Management Plan	Milestone: Management Plan to be
	Development, including HEP (In-	developed consistent with NPPC
	progress, planned for completion in	Program. Property improvements
	1999). Initiate implementation of plan	such as gates, drift fences, signing,
	(property improvements/infrastructure	property boundary definition to be
	and habitat enhancements)	completed. Habitat enhancements
2000	T 1 , , 1 ' 1 ''	initiated.
2000	Implement management plan including	Milestone: To be determined during
	protection, enhancements/restoration, and	management plan process. FY2000
	operations/maintenance	funding to be utilized for habitat
		protection,
		enhancements/restoration, and
		operations/maintenance

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
	PROJECT GOAL: Protect,		
	Enhance, and Mitigate Wildlife		

	and Wildlife Habitat Impacted by John Day and McNary Hydroelectric Development		
1	Provide Wildlife Area Administration - Protect Existing Resources and Habitat Values	a	Conduct General Management Plan Administration:administer Access & Travel Mgt (coord w/ law enforcement)maintain contacts with public user groups (hunters, etc)maintain signage/information exchangeinvolve public in property management/scoping
1			monitor and address trespass livestock, dumping, other illegal uses, etc. conduct fire protection activities
1		b	Conduct General Property/ Infrastructure Maintenance:maintain roads, drainagemaintain fences, barricades, gates, water developments,maintain public information kiosks, informational signs
2	Maintain Habitat Values (HU's) (General)	a	Implement Weed Management Plan:prevention (limit vectors)manual (hand pulling localized areas)chemical (application of herbicides)prescribed fire (spot and landscape treatments)
2		b	Implement Fire Management Planwildfire prevention/suppressionutilize prescribed fire as a tool for habitat maintenance (grassland and forested cover types)
2		С	Maintain Forested Habitats: conduct reforestation (tree planting) to improve/maintain stockingconduct timber stand improvement actitivies (precommercial and

		,	,
			commercial thinning) to maintain/promote tree vigor, forest health, and cover quality
2		С	Forested Habitats (cont):conduct limited commercial thinning/salvage reintroduce fire on regular intervals (based on historic fire intervals) to maintain forest health
2		d	Maintain Grassland Habitats:conduct ongoing noxious weed to maintain existing native communitiesreintroduce fire to assist weed control efforts/maintain native grasslands, prepare sites for natural regeneration, planting, and seeding
2		e	Maintain Riparian Habitats:conduct ongoing noxious weed control
3	Enhance/Restore Habitat Values (Cover Type Specific) Implement habitat enhancement & restoration activities in forested, grassland, and riparian cover types to increase habitat quality (HU's)	a	Enhance Forested Habitats:plant native treesplant native shrubs
3		b	Enhance Grassland Habitats:plant and seed native grassesplant native shrubs
3		С	Enhance Riparian/Wetland Habitats:conduct ongoing revegetation activities following development of floodplain/instream restoration designsdesign and implement instream/floodplain restoration activities

4	Monitor and Evaluate Application of Enhancement Strategies and Operations/Maintenance	a	Implement M&E Programmonitor ATM, public usesestablish permanent monitoring/ photo point plots (all cover types)collect annual water quality data (flow, water quality/chemistry)update HEP evaluation every 10yrs using standard protocols
		a	M&E contconduct annual TES surveysconduct veg stocking surveysconduct annual redd surveys

Objective schedules and costs

01:#	Start date	End date	Measureable biological objective(s)	Milestone	FY2000 Cost %
Obj #	mm/yyyy 1/2000	mm/yyyy 12/2000	Provide Wildlife Area	-Mgt	30%
1	1/2000	12/2000	Administration - Protect	Plan/Property	3070
			Existing Resources and	Administration	
			Habitat Values	Habitat/	
			Thomas varies	Property/	
				Infrastructure	
				Maintenance	
2	1/2000	12/2000	Maintain Habitat Values	-weed control	50.00%
			(HU's)	-fire mgt	
				-habitat/cover	
				type	
				maintenance	
3	1/2000	12/2000	Enhance/Restore Habitat	-Planting -	15%
			Values	Seeding, -	
				Restoration	
				designs	
4	1/2000	12/2000	Monitoring and	-ATM	5.00%
			Evaluation	-Public Uses	
				-Permanent	
				Plots/photo	
				points	
				-Water quality	
				data collection	
				-HEP updates	
				Total	100.00%

Schedule constraints

Potential weather related constraints on individual treatments (i.e., prescribed fire during spring and fall dependent on appropriate conditions), planting/seeding based on available stock)

Completion date

Contracting period through 12/2000

Section 5. Budget

FY99 project budget (BPA obligated): \$0

FY2000 budget by line item

T4	N-4-	% of	EV2000
Item	Note	total	FY2000
Personnel	Includes staff for admin.,	%33	90,817
	maintenance, and enhancements		
Fringe benefits	@28%	%9	25,429
Supplies, materials, non-		%8	23,100
expendable property			
Operations & maintenance	O&M cost incorporated into	%0	0
	personnel and subcontractor line		
	items (road/hab. maint etc.)		
Capital acquisitions or		%0	0
improvements (e.g. land,			
buildings, major equip.)			
NEPA costs	NEPA requirements adequately	%0	0
1,2111,0000	covered under existing	,,,,	· ·
	programmatic EIS/ROD and project		
	management plan		
Construction-related	management plan	%0	0
support		700	O
PIT tags	# of tags:	%0	0
Travel		%9	24,808
Indirect costs		%20	55,812
Subcontractor		%20	55,000
Other		%0	0
7	ГОТАL BPA FY2000 BUDGET RE(QUEST	\$274,966

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
Undetermined at	Cost sharting opportunities	%0	
present	to be pursued during mgt		
	plan development		
		%0	
		%0	
		%0	
Total project cost (including BPA portion)			\$274,966

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$287,377	\$300,626	314,773	\$329,882

Section 6. References

Watershed?	Reference
	Bonneville Power Administration, Washington Dept. Fish and Wildlife, U.S.
	Fish and Wildlife Service, Conf Tribes Colville Reservation, Conf. Tribes
	Umatilla Indian Reservation, Yakama Indian Nation. 1993. Washington
	Wildlife Mitigation Agreement.
	BPA Wildlife Mitigation Program Environmental Impact Statement and
	Record of Decision (FEIS/ROD), (DOE/BPA-0246, June 1997
	Confederated Tribes of the Umatilla Indian Reservation (CTUIR). 1996.
	Wildlife Mitigation Plan for the John Day and McNary Dams, Columbia
	River Basin.
	CTUIR) and BPA. 1997. Memorandum of Agreement Between the CTUIR
	and BPA for Dispursal of Wildlife Mitigation Fund and Wildlife Mitigation
	Crediting.
	Northwest Power Planning Council Fish and Wildlife Program. 1994.
	Oregon Trust Agreement Planning Project, October 1993, U.S. Department of
	Energy, Bonneville Power Administration, Division of Fish and Wildlife,
	Oregon Department of Fish and Wildlife, Confederated Tribes of the Umatilla
	Indian Reservation
	Prose, B., Farmer, A., and Olson, R. 1986. Cost-effectiveness of easement
	and fee title acquisition for mitigating wildlife habitat losses. USDI, Fish and
	Wildlife Service, National Ecology Center, Fort Collins, Colorado, 61 pp.
	Rassmussen, L. and P. Wright. 1990b. Draft wildlife impact assessment,
	John Day Project, Oregon and Washington. U.S. Fish and Wildl. Serv.,
	Portland, Ore. 27 pp
	Rassmussen, L. and P. Wright. 1990d. Draft wildlife impact assessment,
	McNary Project, Oregon and Washington. U.S. Fish and Wildl. Serv.,

Portland, Ore. 28 pp
U.S. Department of Interior, Fish and Wildlife Service. 1980. Habitat
Evaluation Procedures (HEP). Ecol. Serv. Manual 102. Div. Ecol. Servi.,
Washington D.C
Washington Department of Fish and Wildlife. 1995. Priority Habitats and
Species List, Habitat Program. 24pp

PART II - NARRATIVE

Section 7. Abstract

The 8,441 acre Rainwater Wildlife Area, located in the Walla Walla River basin 8 miles south of Dayton, Washington in Columbia County, was established in September 1998 by the CTUIR under the NPPC Fish and Wildlife Program and Washington Interim Wildlife Mitigation Agreement (BPA et al., 1993). Funds for acquisition were made available through BPA under an MOA (CTUIR and BPA 1997). The project was developed to protect, enhance, and mitigate wildlife impacted by development of the John Day and McNary hydroelectric dams. This proposal provides the technical basis for securing operations and maintenance funding beginning in FY 2000. Funding for management plan development, habitat evaluations, interim management, and initial habitat enhancements planned during 1998 and 1999 is available under the existing BPA-CTUIR MOA.

The Rainwater Wildlife Area is a large, contiguous land parcel located in the South Fork Touchet River subbasin adjacent to the Umatilla National Forest. The project provides dual benefits for both resident and migratory wildlife and anadromous and resident fishery resources with 5,500 acres of coniferous forest, 2,091 acres of native grassland, 800 acres of riparian/floodplain habitat, and over over 8 miles of spawning and rearing habitat for anadromous and resident fish resources.

Key target wildlife mitigation species include: spotted sandpiper, great blue heron, yellow warbler, mink, California quail, Western meadowlark, black-capped chickadee, and downy woodpecker. An estimated 4,337 baseline Habitat Units (HU's) have been directly protected through acquisition. An additional estimated 2,783 HU's could be achieved through habitat enhancement for a total of 7,120 HU's.

The property supports a wide variety of wildlife resources and includes transitional, summer, and winter range for big game (Rocky Mountain elk, mule deer, white-tailed deer and black bear and mountain lion) as well as a host of forest dwelling bird species (neotropical migrants, upland game birds (blue and ruffed grouse), and Rio Grande turkeys). Suitable habitat exists several Federal and State Threatened, Endangered, and Sensitive (TES) species: threatened Northern bald eagle, endangered American peregrine falcon; and State sensitive: osprey, great blue heron, Lewis' woodpecker, prairie falcon, turkey vulture, northern goshawk, and golden eagle. The Rainwater area supports known populations of threatened bull trout and proposed threatened Walla Walla River basin summer steelhead trout.

A comprehensive management plan is currently under development and is planned for completion in mid 1999. The plan will be developed consistent with BPA Wildlife Mitigation Program Environmental Impact Statement and Record of Decision (FEIS/ROD), (DOE/BPA-0246, June 1997) which provides the overall framework for habitat protection, enhancement and operations/maintenance.

Section 8. Project description

a. Technical and/or scientific background

The development of dams for hydropower, navigation, flood control, and irrigation in the Columbia River Basin resulted in widespread inundation of riparian, riverine, and upland wildlife habitats (NPPC 1994; BPA et. al., 1993). The 1980 Power Act established and charged the NPPC with the task of developing a comprehensive fish and wildlife mitigation program to protect, mitigate, and enhance fish and wildlife habitat in the Columbia Basin (Power Act 1980, Section 4 (H)(1)(A), page 12; NPPC 1994, Section 2, page 2-1). This program, initially adopted in 1982, was amended in 1984, 1987, 1991-1993, and 1994. Consistent with Section 1003(7) of the Power Council Fish and Wildlife Program, BPA is authorized and obligated to fund implementation of projects that will help reach the Power Council wildlife mitigation goals and objectives.

The Wildlife Impact Assessments for the John Day and McNary Projects (Rassmussen and Wright, 1990b and d), provide estimated losses of 36,555 and 23,545 Habitat Units resulting from the John Day and McNary Hydroelectric facilities, respectively. Habitat losses included upland, island, and river habitats. Mainland habitats, totaling an estimated 20,858 acres for the John Day facility and 12,898 acres for the McNary facility, consisted of shrub/steppe grassland, riparian hardwood, riparian shrub, riparian herb, emergent wetland, sand dune, sand/gravel/cobble/mud, disturbed/bare/riprap, and open water cover types. Approximately 6,708 acres of island habitats associated with the John Day facility and 2,741 acres associated with the McNary facility were impacted.

The Rainwater Wildlife Area was developed by the CTUIR to offset wildlife habitat losses related to the John Day and McNary hydroelectric projects. The area is located offsite and will provide mitigation primarily in-kind (e.g., the project area is located outside the Columbia River corridor, thus off-site, and individual habitat types and species

impacted by hydroelectric development will be mitigated for by the project, thus in-kind mitigation). In addition, the project will provide dual benefits for both fish and wildlife with over 8 miles of spawning and rearing habitat in the upper South Fork Touchet River.

NPPC program measures including 7.6.A, 7.6B, 7.6C, 7.6D, 11.3A, 11.3D are addressed under this project. The 8,441 acre project area encompasses a large portion of the upper South Fork Touchet River subbasin abutting the Umatilla National Forest on the southern portion of the property. The property contains approximately 5,550 acres of forested environments, 2,091 acres of timbered stringers and native grassland habitats, and over 800 acres of floodplain riparian habitat. Key target wildlife mitigation species include: spotted sandpiper (Actitis macularia), great blue heron (Ardea herodias), yellow warbler (Dendroica petechia), mink (mustela vison), California quail (Lophortyx californicus), Western meadowlark (Sturnella neglecta), black-capped chickadee (Parus atricopillus), and downy woodpecker (Picoides pubescens). Suitable target species that may be included in the habitat evaluation include mule deer (Odocoileus hemionus) and blue grouse (Dendragapus obscurus). An estimated 4,337 baseline HU's were protected through acquisition. An additional estimated 2,783 HU's could be achieved through habitat enhancements. Estimated benefit of the project expressed through HU's is 7,120 units.

The CTUIR are currently conducting a baseline study using the Habitat Evaluation Procedures or HEP (USFWS 1980) of wildlife habitat on the Rainwater property to establish existing, baseline habitat conditions for target wildlife mitigation species and estimate future habitat conditions resulting from management and enhancement activities. Riparian habitat surveys were completed November 1998. Upland grass and timber cover type surveys are planned for completion by early summer 1999. The HEP study is planned for completion in mid summer 1999, which will then be incorporated into the comprehensive management plan. Existing habitat values, expressed in HU's, will be credited as protection credits per CTUIR-BPA MOA. Habitat Units developed under the management plan through habitat enhancements will also be credited to BPA.

The former Rainwater Ranch was historically used for grazing livestock, logging, and recreational hunting and fishing. Evidence of recent timber harvest is evident in the southern half of the property with extensive road construction and skyline logging-related erosion present. Much of the Rainwater property has been logged in the past 50 years. Less than 5 percent of the forested cover types provide old growth structure. Most timber stands logged in the past decade are currently in an early to early-mid structural stage with limited canopy closure (<30%), low basal area (<30 square feet), and low snag density (<2 snags/acre). Stands harvested 30-40 years ago are currently in a middle to late-mid structure stage with moderate canopy closure (40-60%), moderate basal area (30-50 square feet), and low to moderate snag density (2-4 snags/acre). These stand conditions provide poor to fair habitat suitability for target species such as black-capped chickadee and downy woodpecker which are dependent on quality cover, moderate basal area, and snag densities for nesting, roosting, and foraging.

The property contains over 800 acres of riparian/floodplain habitat with over 8 miles of spawning and rearing habitat along the South Fork Touchet River. Fish species present

include summer steelhead and rainbow trout (Onchorhynchus mykiss), and bull trout (Salvelinus confluentus). The South Fork Touchet River is thought to be historic spring chinook salmon (Onchorhyncus tshawytscha) spawning and rearing habitat. Instream habitat conditions are generally in poor to fair condition with few large pools, a low pool to riffle ratio, intermittent flow, low levels of large woody debris, unstable streambanks, and poor shading. Riparian/floodplain habitat suitability for riparian-dependent target wildlife species such as yellow warbler, great blue heron, spotted sandpiper, and mink is rate poor to fair with moderate basal area, riparian shrub and tree density, and cover quality. Drawbottom roads, past livestock grazing, commercial logging, and flooding have all contributed to existing conditions.

Noxious weed infestations on the property are currently adversely affecting native plant communities and habitat quality. Primary noxious weeds include yellow star thistle and Canada thistle. Total acreage of infestation is currently under review. Prominent stands of both species exist along primary roads, rock pits, log landings, and along the South Fork Touchet River.

Water quality data is limited for the project area. Based on temperature probes installed in the South Fork Touchet by CTUIR staff during the summer of 1997, summer low flow water temperatures typically exceed maximum temperatures for salmonid species (62 degrees Fahrenheit) due to lack of shade and perennial water.

Sediment yields from the property are thought to be elevated over natural conditions due to historic land-use activities in the subbasin (i.e., road development, logging, livestock grazing). Native surfaced roads (dirt roads) along the South Fork Touchet River and major tributaries contain very poor drainage, which is contributing significant sediment to fish-bearing streams. A road network developed in the upper portions of the property was constructed on slopes exceeding 60 percent. Cutbanks and sidecast remains relatively unstable and continues to contribute sediment to streams. In addition, landslides through road prisms have washed out roadbeds in several locations, resulting in significant, and chronic sediment sources on steep, unstable slopes. Additional existing condition data is on file at CTUIR DNR Wildlife Office.

Habitat restoration and enhancement activities are currently under development as part of the comprehensive management plan. Habitat enhancements will be initiated beginning in early 1999 and will initially include various infrastructure needs (fences, gates, signs), native grass seed, shrub, and tree collection/propagation for use in restoration activities, and reconnaissance/layout for planned treatments. Initial enhancements will be accomplished using existing funding which is expected to meet project needs until FY2000.

The Rainwater Wildlife Area provides significant opportunities to protect and enhance habitat for several target wildlife species, improve water quality and instream habitat conditions, and contribute to Walla Walla Basin anadromous fish restoration. This proposal provides the framework for establishing operations and maintenance activities following initial investments in habitat enhancements and restoration activities.

Operations and Maintenance on the property is necessary to: 1) conduct administrative activities associated with property management; 2) maintain and protect existing habitat values; 3) conduct limited additional habitat enhancement activities; and 4) conduct monitoring and evaluation.

b. Rationale and significance to Regional Programs

The Rainwater Wildlife Mitigation Project contributes to the 1994 Fish and Wildlife Program goals and objectives of achieving and *sustaining levels of habitat and species productivity* as a means of fully mitigating wildlife losses caused by construction and operation of the federal and non-federal hydroelectric system (11.1). More specifically, the project area addresses the following goals and principles listed in FWP Section 11.2D.1, which states, "In developing wildlife mitigation plans and projects, demonstrate to the extent to which the plans/projects comply with the following principles:"

• Are the least-costly way to achieve the biological objective.

Perpetual protection of the habitat types (riparian/wetland, native grassland, and coniferous forest) provided by the Rainwater Wildlife Area has been accomplished through fee title acquisition. In a study comparing various mitigation methods (i.e., fee title acquisition and easements), Prose et. al. (1986) concluded that "Fee title land acquisition and subsequent management is generally more cost-effective than easements." Similarly, wildlife agency acquisition specialists have also consistently found fee title acquisition to purchase land for wildlife mitigation is usually more economical in the long-term compared with the purchase of easements (Oregon Trust Agreement Planning Project, BPA et al. 1993).

• Have measurable objectives, such as the restoration of a given number of habitat units.

Management objectives for target wildlife mitigation species are based on the U.S. Fish and Wildlife Service Habitat Evaluation Procedures (USFWS, 1980). Measured baseline HU's for the Rainwater Wildlife Area have not been established. Habitat surveys are currently underway to assess baseline conditions. Under the CTUIR-BPA MOA, the CTUIR has identified an estimated baseline 4,337 HU's. An estimated 2,783 HU's can be developed through habitat enhancements for a total project benefit of an estimated 7,120 HU's.

Protect high quality native or other habitat or species of special concern, whether at the project site or not, including endangered, threatened, or sensitive species.

By virtue of its size, the Rainwater project area lends itself to the protection and enhancement of biological diversity and ecological integrity in the Walla Walla River basin. The property contains over 5,500 acres of forested environments which will benefit target wildlife mitigation species dependent on forest environments such as the downy woodpecker, black-capped chickadee, mule deer and blue grouse. An estimated 2,091 acres of native grasslands provide suitable habitat for target species such as western meadowlark. In addition, over 800 acres of riparian/floodplain cover types provide

habitat for the yellow warbler, great blue heron, mink, spotted sandpiper, and California quail.

The Rainwater Wildlife Area contains suitable habitat for several Federal and State Threatened, Endangered, and Sensitive (TES) species including threatened Northern bald eagle, endangered American peregrine falcon, and State sensitive osprey, great blue heron, Lewis' woodpecker, prairie falcon, turkey vulture, northern goshawk, and golden eagle. In addition, the Rainwater area supports known populations of threatened bull trout and proposed threatened Walla Walla River basin summer steelhead trout.

• Where practical, mitigate losses in-place, in-kind.

Under the CTUIR Wildlife Mitigation Plan (CTUIR 1997), the Tribes are developing onsite wildlife mitigation project opportunities with the U.S. Army Corps of Engineers and the City of Richland. Ongoing project planning efforts involve proposals to incorporate existing Corps General Wildlife lands into the NPPC Fish and Wildlife Program. Within the CTUIR's Ceded Territory, existing Corps lands appear to be the most viable project opportunities located in the Columbia River corridor, particularly adjacent to Lake Wallula. However, onsite opportunities are greaty limited as a result of ongoing operational impacts, inconsistent land use designations, existing jurisdictional conflicts, and constraints created by transportation corridor impacts. Because of these limitations, the CTUIR has pursued and developed off-site wildlife mitigation project opportunities.

The Rainwater Wildlife Area was prioritized and ultimately selected for project developed by the CTUIR because of the location and size of the property and its ability to achieve dual benefits for both fish and wildlife. Although the project area is located offsite, it is within about 42 aerial miles of Lake Wallula on the Columbia River and about 24 aerial miles from the Snake River near the Ice Harbor facility. Of the eleven target wildlife mitigation species for the John Day and McNary projects, the Rainwater Wildlife Area will provide benefits for 8 target wildlife species. The project HEP team will consider incorporation of mule deer and blue grouse as additional evaluation species.

• Where possible, achieve dual benefits for fish and wildlife

In terms of the project achieving dual benefits, the property supports spawning populations of bull trout and summer steelhead and has the potential to substantially contribute to Walla Walla River Basin anadromous fish restoration by improving juvenile salmonid survival and rearing. CTUIR Fisheries and Wildlife Programs are coordinating development of NPPC proposals to effectively address watershed resources on the Rainwater Wildlife Area, including instream fish habitat conditions and water quality and quantity.

• Help protect or enhance natural ecosystems and species diversity over the long term.

Perpetual protection and management of the 8,441 acres of upland and riparian habitats found on the Rainwater Wildlife Area provides habitat for 9 target wildlife mitigation species impacted by the John Day and McNary dams. Because of its size and location

adjacent to National Forest System lands, the property will contribute to the protection and enhancement of resources, natural ecosystems, and species diversity in the northern Blue Mountain physiographic province on a landscape scale.

• Complement the activities of the region's state and federal wildlife agencies and Indian tribes.

The location of the Rainwater area and its management for resident and migratory wildlife and anadromous fish and water quality, directly complements federal and state land manager efforts to manage and protect resources in the local as well as regional area. The property abuts Washington State Department of Natural Resource lands on the north and Umatilla National Forest system lands on the south. In addition, the property is located entirely within the Ceded Lands of the Confederated Tribes of the Umatilla Indian Reservation. Habitat protection and enhancement of the property therefore meets CTUIR goals of protecting, restoring, and enhancing key wildlife habitats on the Ceded lands of northeastern Oregon and southeastern Washington (CTUIR Wildlife Mitigation Plan for the John Day and McNary Dams, Columbia River Basin, 1997). Furthermore, it promotes other key Tribal goals and activities including: 1) increasing opportunities for tribal members to exercise treaty rights reserved in the Treaty of 1855; 2) developing and promoting Tribal co-management and cooperative agreements with other federal, state, and tribal agencies for the benefit of biological and cultural resources in the Columbia Basin; 3) promoting regional/landscape biological diversity; 4) maintaining consistency with the Power Council Fish and Wildlife Program; 5) assisting BPA in meeting their wildlife mitigation obligations in a cost-efficient manner; 6) minimizing expenditures on mitigation planning and maximizing on-the-ground mitigation, enhancement, and protection of wildlife habitats.

Encourage the formation of partnerships with other persons or entities, which would reduce project costs, increase benefits and/or eliminate duplicative activities.

Development of the Rainwater project is in its initial stages. The CTUIR have initiated involvement of the WDFW and stakeholder groups to foster cooperative efforts on this project. The initial public scoping meeting conducted in October 1998 is key to opening dialogue with interested parties to protect and manage the property and achieve the goals and objectives of the program. The CTUIR are also currently working with the WDFW to develop an MOA between the state and CTUIR to cooperatively work on the Rainwater property and adjacent lands.

Many of these activities will help build relationships with a wide range of potential project partners. By example, the WDFW Upland Habitat and Access Program, designed to provide landowners with upland habitat restoration funding and development/implementation/enforcement of access and travel management plans, is a partnership the CTUIR is currently developing. Other partners may include the Rocky Mountain Elk Foundation/Blue Mountain Elk Initiative, U.S. Army Corps of Engineers instream and riparian habitat restoration planning program design to provide assistance on a cost-share basis for the survey and design of instream and floodplain restoration projects, and various conservation organizations.

Other potential project partnerships that will be pursued in the coming years could include a wide variety of entities including but not limited to: U.S. Department of Agriculture, Forest Service and Natural Resource Conservation Service, Lower Columbia Audubon, National Wild Turkey Federation, etc.

c. Relationships to other projects

The Rainwater Wildlife Area was developed under the Washington Wildlife Mitigation Agreement (BPA et. al., 1993) involving state agencies, and federal and tribal governments. Thus, the Rainwater Project is, through the NPPC program, related to wildlife mitigation projects developed by other agencies and tribes in the State of Washington that collectively have been developed to offset habitat losses from hydroelectric development along the Columbia River.

In addition, the Rainwater project is also related to various anadromous fish habitat and watershed efforts in the Walla Walla River Basin. Both the State of Washington, CTUIR, and other agencies/entities are developing and implementing watershed restoration efforts to address factors limiting restoration of anadromous fish populations. Key limiting factors in the basin include water quality and quantity, instream habitat conditions, and fish passage. The Rainwater project will achieve dual benefits for both fish and wildlife and contribute to basin-wide restoration efforts through various means including: 1) habitat protection (over 8 miles of spawning and rearing habitat directly protected through land acquisition; and 2) development and implementation of the management plan which will incorporate objectives of improving water quality and quantity and instream habitat conditions.

d. Project history (for ongoing projects)

The Rainwater Wildlife Area was established in September 1998 through a land acquisition developed and implemented by the CTUIR. The acquisition is the product of several years of wildlife mitigation project planning and development by CTUIR in southeastern Washington. Negotiations with the previous landowner (Miller Shingle Company) began during development of the CTUIR's Wildlife Mitigation Plan completed in October 1997 and culminated in late 1998 with an acquisition agreement.

September 1998:

• CTUIR close acquisition transaction, take title to 8,441 acre Rainwater Ranch

October 1998:

- CTUIR initiates management of property, including development of Access & Travel Plan, signing property, and initiating riparian cover type surveys for use in HEP analysis.
- CTUIR develop and publicize Interim Management Regulations for management of property until comprehensive management plan can be completed.

 CTUIR organizes and conducts public meeting in Dayton, Washington and invites public/stakeholder groups to discuss interim management and participate in development of management plan for property.

November 1998

- CTUIR establishes advisory committee to participate and help with development of
 management plan. Advisory committee currently assisting CTUIR with development
 of Proposed Management Action which will be used to conduct public scoping and
 solicit comments/issues and concerns. Advisory committee to compile public input
 for incorporation into comprehensive management plan.
- CTUIR establishing technical committee to design and conduct Habitat Evaluation using Habitat Evaluation Procedures (USFWS, 1980) for target wildlife mitigation species.
- CTUIR staff complete riparian habitat surveys using standard protocol. Upland grass and timber cover types planned for survey in spring 1999.

December 1998

- Advisory Committee begins development of project management plan proposal, which will provide basis for public scoping. Distribution of proposed action scheduled for late December/early January 1999.
- Technical Committee begins review of HEP procedures, models, survey protocols and status of ongoing field surveys. Reviews existing data and information related to existing/baseline habitat conditions. Identify data gaps and make preparations for spring/summer 1999 field work/data collection efforts.

January - May 1999

- Public comment on proposed action solicited. Public meetings are conducted.
- Advisory Committee compiles public input and incorporates into project management strategies.
- Technical Committee continues compilation of baseline habitat conditions and begins development of habitat specific desired future conditions, compares baseline with DFC's, and identifies potential habitat enhancement opportunities.
- HEP survey crew prepares for spring-summer field season, initiates field work in upland grassland and forested cover types.
- Management activities such as boundary definition, gate/fence installation, signage initiated.
- Initiate Archaeological Investigation/Cultural Resource Surveys, TES fish, wildlife, plant surveys, etc.

May - August 1999

- Advisory Committee/Technical Committee complete review of public comment, development of management strategies/elements, baseline habitat conditions (including field survey data), DFC's enhancement/restoration strategies, futures analysis.
- Management Plan elements synthesized into Comprehensive Management Plan with 5-Year Action Plan including:

- 1) Access & Travel Management Plan
- 2) Public Use Opportunities
- 3) Habitat Protection Elements
- 4) Habitat Enhancement and Restoration
- 5) Operations & Maintenance
- 6) Monitoring & Evaluation
- Conduct any necessary environmental review (NEPA/Checklist) with BPA under Wildlife Program EIS

September – December 1999

• Initiate implementation of management plan

e. Proposal objectives

The overall goal of the Rainwater Wildlife Area Project is to protect, enhance, and mitigate wildlife and wildlife habitat impacted by hydroelectric development in the Columbia River Basin. Project benefits will be credited towards the John Day and McNary facilities.

Resource specific goals include:

- Promote and maintain self-sustaining, functional ecosystem/watershed
- Protect, restore, and enhance water quality, quantity, and instream fish habitat conditions
- Protect, restore, and enhance upland and riparian habitat
- Reduce noxious/undesirable weed species and encourage restoration of native plant communities
- Protect and enhance habitat for Federal and State recognized threatened, endangered, and sensitive species
- Provide for cultural and recreational uses of the property consistent with resource conservation objectives

Project objectives outlined in Section 4 are illustrated in this section and elaborated upon. Addition detail and specific techniques is provided in the Methods section below.

Objective 1 Provide Wildlife Project Area Administration

- A. Management Plan Administration
 - -plan annual budgets, staffing, tools, supplies
 - -administer access and travel management plan and coordinate enforcement with local law enforcement officials
 - -maintain contacts with public user groups and provide opportunities for communication between users and managers
 - -monitor and address trespass livestock, dumping, other illegal/non-permitted uses
 - -conduct fire protection activities including monitoring fire conditions
 - -protect baseline habitat units (4,337 HU's)
- B. Conduct General Property/Infrastructure Maintenance

- -maintain roads including surfaces, drainage, culverts to minimize erosion/sediment transport
- -maintain fences to prevent trespass livestock
- -maintain access and travel plan road closure devices (gates and barricades) to maintain roads closed to motorized travel and high levels of habitat security -maintain public information kiosks and informational signing

Objective 2 Maintain Habitat Values

- A Implement Weed Management Plan
 - -implement preventative measures (limit vectors and establishment of new noxious weed populations)
 - -implement manual treatments (handpulling localized areas)
 - -implement chemical treatments (herbicidal treatments) as last resort to other treatments
 - -design and implement prescribed burning treatments as tool to assist with noxious weed management
- B Implement Fire Management Plan

tool to assist with habitat maintenance

- -conduct wildfire prevention to minimize risk of human-caused wildfire including monitoring local fire conditions and implementation of appropriate actions (i.e., property/road closures, restrictions on uses, etc.)
- -conduct wildfire suppression in cooperation with WDNR (initial attack, mop-up) -design and implement prescribed fire in forested and grassland cover types as
- C. Forested Habitats
 - -conduct reforestation activities (site preparation and planting) to improve/maintain desirable tree stocking levels
 - -conduct timber stand improvement activities (precommercial and commercial thinning) to maintain and promote tree health/vigor and habitat quality
 - -conduct limited commercial thinning/salvage activities
 - -reintroduce prescribed fire on regular intervals to maintain forest health and assist with habitat restoration/enhancement
- D. Grassland Habitats
 - -conduct noxious weed management to address weed issues and loss of habitat diversity/suitability
 - -reintroduce prescribed fire to assist weed control efforts, maintain existing native plant communities, and prepare sites for natural regeneration, planting, and seeding
- E. Riparian/Floodplain Habitats
 - -conduct noxious weed management

Objective 3 Enhance and Restore Habitat Values

- A. Enhance and Restore Forested Habitat
 - -ongoing weed management/control
 - -plant native trees and shrubs
- B. Enhance and Restore Grassland Habitat
 - -ongoing weed management/control

- -plant and seed native grasses
- C. Enhance and Restore Riparian/Wetland Habitat
 - -ongoing weed management/control
 - -design and implement instream/floodplain restoration activities

Objective 4 Monitor and Evaluate Application of Enhancement Strategies and Operations/Maintenance

- -monitor ATM, public uses
- -established permanent monitoring/photo points in forested, grassland, and riparian habitat types
- -establish permanent water quality monitoring stations, collect water quality data and structural habitat information (total station)
- -complete initial HEP evaluation and plan for future updates (10yr interval)
- -conduct population surveys of key indicator species to track trend/response

f. Methods

A. Management Plan Administration

Administrative tasks are necessary to protect existing resource values. Annual tasks include, but are not limited to: preparing and managing annual budgets and staff, vehicles, tools, etc; contracting for various project-related services; conducting and maintaining public involvement; and maintaining an active presence on the property. Management plan administration includes conducting patrols on the property to monitor and enforce access and travel restrictions to maintain habitat security and prevent resource damage, monitoring recreational uses and non-permitted activities such as motorized travel on closed roads, trespass livestock, dumping, vandalism, etc. Coordination with local law enforcement to enforce property regulations is also an administrative activity. Posting and maintaining information on the property is required to inform user groups of regulations and access and travel requirements. Posted information may include kiosks showing maps of the property, regulations governing appropriate uses of the lands, seasonal restriction notices such as extreme fire danger periods or seasonal road closures, notices of changes in regulations, and scheduled public meetings.

An onsite project caretaker will be responsible for monitoring road closures, conducting weekly and seasonal inspections of road systems and closure devices, monitoring for trespass livestock and other non-permitted uses and coordinating with law enforcement. We anticipate property inspections to occur on a weekly basis with increased efforts during fall hunting seasons. Making contacts with property users is also an administrative tasks and is necessary to make contacts with individual to ensure property regulations are understood and adhered to as well as provide an opportunity for individuals to provide input on management of the property and/or to ask questions. Specific methods include traveling road network via ATV or 4X4 truck on scheduled intervals to check condition of closure devices, non-conformance with property regulations.

Fire protection activities are also part of administrative duties and involves monitoring local fire conditions in conjunction with US Forest Service and Washington DNR and issuing fire precaution warnings and/or restrictions on certain types of use depending on severity of conditions. Fire protection also includes posting information about how to prevent wildfires and patrolling the property to monitor uses.

In addition, coordination with WDNR will be accomplished on forest practice act standards (i.e., road maintenance, forest management activities, and prescribed fire). Coordination with other local, state, and federal agencies involved in statutory and regulatory authority over property management (local land-use regulations, game laws, threatened and endangered species, cultural resource protection, etc.)

B. <u>Conduct General Property/Infrastructure Maintenance</u>

General property and infrastructure maintenance is also part of resource protection. Activities and methods include planning, scheduling, preparing and administrating contracting (if necessary), and implementing road maintenance, boundary and interior fence repair, road closure devices (gates, barricades), water developments, and kiosks/information signs. Road maintenance methods involve heavy equipment (rubbertired back/tracked excavator, grader) which will be used to clean drainage ditches, maintain culverts/crossings, addressing erosion problems, conducting limited road surface repair (spot rocking) and grading, and repairing/maintaining earthen barricades (used to physically close roads). Heavy equipment needs on the project will generally be contracted with private vendors. Methods to maintain closure devices include installing replacement structures, repairing/installing gate posts and welding/fabrication. Fence maintenance methods involve splicing breaks, installing barbed wire, repairing rock jacks, bucking and removing blowdown trees, etc. Methods involved in maintaining kiosk and informational signs include repairing damaged materials and painting.

Road maintenance is necessary to prevent/minimize resource damage from erosion and sedimentation. Road maintenance contributes to the objective of resource protection by preventing and/or minimizing sediment transport/erosion and associated degradation of water quality. The road closure program contributes to habitat protection by minimizing vehicular-related disturbance and maintaining high levels of habitat security (e.g., low open road density). Fence maintenance assist in habitat protection by preventing trespass livestock.

Objective 2 Maintain Habitat Values

A Implement Weed Management Plan

The control, eradication, and prevention of noxious weed infestations is both necessary and desirable to maintain habitat values. Noxious weeds such as yellow star thistle and Canada thistle adversely affect habitat values. Noxious weeds can replace native plant communities and decrease the abundance and quality of cover and forage habitats. An estimated 1,500 to 2,000 acres are moderately to severly infested with primarily yellow star thistle and/or Canada thistle. Weed management includes prevention of additional or new infestations and control/eradication of existing infestations. Roughly 10 to 25% of

the infested acreage would be treated annually depending on treatment type (i.e., chemical treatments would result in less total annual treatment compared to prescribed burning treatments). Control measures include manual and chemical techniques. Application of weed management strategies is intended to decrease the occurrence of noxious and undesirable non-native weedy species and increase the abundance of native plant communities with associated benefits of increasing habitat suitability.

Maintaining habitat values includes a wide variety of activities and methods. Treatment methods include a combination of prevention, manual, chemical, and prescribed fire. Methods for prevention involve limiting vectors (transport mechanisms of seeds and/or plant parts). Implementation of access and travel restrictions, prohibiting use of infested livestock feed and seed stock, and requiring contracted equipment operators to clean equipment are all components of the prevention strategy. Manual treatment methods include hand-pulling and burning collected noxious weed material and/or use of livestock under controlled conditions to consume noxious weeds (i.e., use of sheep during early growing season on patches of yellow star thistle). Chemical treatments include use of certified herbicides. CTUIR staff are or will become certified applicators. Herbicidal treatments will only be used following review and /or application of other control techniques. Specific application techniques will be conducted consistent with existing regulatory standards. Prescribed fire is also a tool that can be applied to destroy dormant seed sources and prepare sites for seeding and planting. Methods involve identification of suitable burn plots, establishing fire lines, and igniting plots under appropriate environmental conditions. Two distinct types of prescribed burning efforts are anticipated: spot burns designed to treat small, isolated weed patches (i.e., adjacent to a road) which can be accomplished with small work crews using propane torches; and unit burns involving larger treatment units that will be treated using seasoned fire crews (i.e., contractor crews, hotshot crews).

B Implement Fire Management Plan

Fire management includes prevention, suppression, and active use of fire as a management tool to accomplished project goals and specific objectives. Fire is a natural and desirable feature of the landscape. However, uncontrolled wildfires in areas where fire suppression has been the rule for nearly a century can adversely impact resources. Wildfire prevention activities are designed to contribute to habitat maintenance by minimizing risks of a wildfire start from campfires or other human uses. Activities include monitoring seasonal fire conditions, posting fire precaution levels, and taking appropriate actions to prevent wildfire starts. Actions, by example, could include closing property to all motorized uses and prohibiting campfires/burning during extreme fire risk periods. Prevention also includes education of user groups and conducting patrols to ensure regulations are adhered to. Outcomes of fire prevention include minimizing the risk of an inadvertent wildfire start and associated loss of resource values.

Controlled burns (prescribed fire) is a resource management tool that can be used to: maintain appropriate stocking levels and composition in forested and grassland environments; maintain fuel levels at or near historic levels; invigorate shrub and browse communities; and help control weed invasions by destroying dormant seed and prepare

seedbeds for seeding and planting native plants. An estimated 300-500 acres of grassland and 500-1,000 acres may be treated annually. Larger annual treatment units generally decreases costs of prescribed fire treatments. Anticipated outcomes of prescribed fire include: maintenance of a fuel mosaic/loading representative of historic conditions; reduce noxious weeds by consumption of plants and destruction of dormant seed; maintenance of desirable tree stocking/species composition in forested cover types; and maintained composition and structure of native grassland cover types.

C. Forested Habitat Maintenance

Forested cover types provide nesting, foraging, and roosting habitat for several target mitigation species. Habitat maintenance involves conducting forest management activities that maintain tree health (growth vigor), forest structure (horizontal and vertical diversity), cover quality (canopy closure/density), and snag availability. Forest management and maintenance activities include reforestation, thinning, and reintroduction of fire.

Reforestation is an activity associated with forested cover types and involves tree planting. Planting is used to alter community composition (i.e., planting ponderosa pine in place of grand fir to increase diversity) and maintain appropriate stocking rates to ensure individual timber stands are fully stocked. Methods involve physical installation of seedlings (1-2yr. Stock) on variable spacing using handtools. CTUIR staff and contractor staff to conduct work. Roughly 2-300 acres of planting in forested cover types will be conducted annually. Outcomes include maintaining and promoting healthy, vigorous, diverse timber stands that provide high quality habitat (basal area, cover quality, and snag availability) for target species and other wildlife and healthy watershed conditions (reduced clear-cut equivalency acreage).

Timber stand improvement activities include tree thinning to reduce competition and maximize tree growth while maintaining habitat values (particularly cover quality). Precommercial thinning involves spacing desirable leave trees at variable distances (minimum of 8X8(8 feet by 8 feet) with 10X10 or 12X12 more common) by felling seedlings/saplings. Leave trees will consist of a mixture of species with preferential retention for early seral species (western larch, Douglas-fir, and ponderosa pine). Diseased trees (i.e., mistletoe) will be felled. Slash will be bucked into smaller pieces to encourage decomposition and to minimize hazardous fuel buildup. Spacing criteria will include provision for variability to minimize created openings and loss of cover quality. An estimated 3-3,500 acres of forested cover type is currently in need of precommercial thinning treatments. An estimated 3-500 acres of precommercial thinning could be accomplished annually. Work will be accomplished with CTUIR and contractor crews using chainsaws. Outcomes include improved tree spacing, reduced competition, improved growth rates, increased rate of cover development, and corresponding increases in habitat suitability for target wildlife species.

Commercial thinning is a management tool used in stands beyond precommercial thinning size containing a marketable product. Stand prescriptions include single tree selection and group selection to reduce tree competition and improve vigor while

capturing marketable commodity. Commercial thinning would be driven by habitat objectives of protecting resources including basal area, cover quality, and snag densities.. By example, a commercial thinning could be planned to decrease stocking and increase growth rates to improve stand structure and cover quality. Salvage operations include utilizing blowdown material and insect/disease damaged timber. Logging systems include ground-based equipment (feller-buncher, skidder), and skyline/helicopter. Commercial thinning operations are normally marginally economic due to log sizes and condition of pulp markets. Other options for accomplishing habitat needs include pole and firewood sales on limited, unit basis.

Reintroduction of fire in forest timber types is designed to mimic natural fire occurrence intervals and achieve stocking, tree health, and stand composition objectives. Methods include identification of treatment units, construction of fire lines (if necessary), ignition under controlled conditions, control, and mop-up (extinguishing). CTUIR and contract crews will be employed to accomplished specific burn plans.

D. Grassland Habitat Maintenance

Habitat maintenance in upland grassland cover types includes noxious weed management and reintroduction of fire. The objective is to decrease/control noxious weed species and promote maintenance of native and/or native like grasslands that provide high quality habitat conditions for target species such as the western meadowlark, blue grouse, and other wildlife resources (including quality big game forage). Treatments will be followed up with planting and seeding native stock. Prescribed burning treatments will be coordinated with availability of native seed stock collection and propagation schedules to ensure materials are available to complete the treatment objectives. Primary grassland communities include bluebunch wheatgrass, Idaho fescue, and Sandberg's bluegrass. Prescribed fire methods include identification of treatment units, construction of fire lines, ignition under controlled conditions, control, and mop up. Post-burn methods include broadcast seeding, rangland drilling on suitable sites, and planting plugs of native grasses. Work will be accomplished by CTUIR and contractor crews. Outcomes include maintenance of existing native plant communities, improved species/community composition, reduced noxious weeds, and improved habitat conditions for target and other wildlife species.

E. Riparian/Floodplain Habitat Maintenance

Maintenance in riparian and floodplain habitats consist primarily of noxious weed control and follow-up planting of riparian shrub and trees and conifer seedlings (follow-up after initial habitat enhancements. Methods for noxious weed treatment include primarily manual (hand-pulling) and spot fire treatments (propane torches). Planting methods include installation of tube stock, whips, and poles using planting poles, shovels, augers, and/or equipment mounted stinger. Shrub species include willow, dogwood, mock orange, and rose spp. Tree species include black cottonwood, alder, and conifer (ponderosa pine, Douglas-fir, and western larch).

Objective 3 Enhance and Restore Habitat Values

Habitat enhancement and restoration will be initiated during FY1999 under the existing CTUIR-BPA MOA and comprehensive management plan. Additional and/or ongoing enhancement and restoration activities could include a wide variety of activities such as: ongoing planting and seeding activities, road obliteration and rehabilitation, installation of additional upland water developments, and design and implementation of instream/floodplain restoration projects (including large wood additions). Detailed restoration activities will be develop under the management plan.

Objective 4 Monitor and Evaluate Application of Enhancement Strategies and Operations/Maintenance

Monitoring and evaluation will be conducted to assess effectiveness of administrative, maintenance, and enhancement/restoration strategies. M&E activities include conducting property patrols and recording visitor use and documenting non-permitted vehicle use on closed roads; installing and recording data on permanent cover type plots (forested, grassland, and riparian); installing and taking photos on permanent photopoints; conducting TES surveys, and stocking/census surveys in planted areas. In addition, a variety of fish habitat and water quality monitoring activities will be conducted under the anadromous fish habitat program and/or in cooperation with WDFW including: annual redd surveys and establishment of permanent monitoring stations (temperature, flow, chemistry, cobble embeddedness, streambank stability, total station/cross section).

g. Facilities and equipment

As a full service Tribal Government, the CTUIR possesses a full range of support facilities and services necessary to implement and manage a project of the magnitude of Rainwater, including both technical and administrative staff. Tribal government offices have been consolidated in recent years within a series of buildings in the Tribal Government Complex near the Umatilla Reservation center where other community facilities are located. The Tribal Wildlife Program is located in an office complex with the Tribal Fisheries Program. Our building contains sufficient private and shared office space for both existing and future professional and management staff, a fully equipped secretarial services center, a conference/meeting room, library, and supply storage space.

Tribal offices are electronically interconnected through a LAN network, and feature modern Pentium computer work stations for each existing staff member. Current software capabilities include extensive word processing, spread sheet, data base development and management, and GIS (ArcView) capabilities. In addition, several General Service Administration (GSA) vehicles (primarily 4X4 trucks) and All Terrain Vehicles and trailers are available to Wildlife Program staff. Field and sampling equipment has previously been secured to conduct HEP evaluations and monitoring and evaluation.

Office and storage space is currently being secured in Dayton, Washington in cooperation with the WDFW to provide facilities near the project area. The onsite caretaker will be stationed in Dayton to provide day-to-day administration of the project. Seasonal work

crews will camp on the property using program RV's, tepees/wall tents during spring and summer periods.

Heavy equipment needs for project maintenance such as tracked excavators/backhoes and similar equipment will generally be contracted. Government surplus equipment such as water pumps, etc will be pursued to limited program expenses.

h. Budget

Out-year costs estimated in Section 5 are based on calculations that incorporate a maximum 5% merit increase for permanent personnel and a 3%, maximum annual cost of living increase associated with inflation. The inflation rate was applied to materials and supplies, travel, and contracting. Following is a summary of activities planned under each major budget line item.

Personnel:

Funding for personnel includes necessary staffing to administer, plan, and implement operations and maintenance of the property. Key staff include: administrative oversight provided by an administrative/program manager, project manager (project biologist), onsite caretaker, biological technicians, and limited GIS/Cartographic support.

The majority of personnel funding is identified for the project manager, onsite caretaker, and biological technician staff. Individuals funded under these positions will be responsible for administration of the management plan, implementation of project area maintenance, design and implementation of resource specific maintenance, and monitoring and evaluation. In addition, these staff will perform as contracting officers for subcontracts developed for various project activities. The project manager will accomplish the majority of public involvement/scoping, management plan updates, design, layout, and contracting for habitat maintenance and enhancement, and scheduling for monitoring and evaluation.

Fringe Benefits:

Fringe incorporated at standard rate of 28% per CTUIR personnel department.

Services, Supplies, Materials, Non-Expendable Property:

Included under this line item of budget are materials such as fence material, signs, film; office supplies (pens, paper, et. al.,); printing/duplication, office equipment rental (fax, copy machine); communications (cellular service); advertising (public notices); postage and freight (newsletters, etc.).

Travel:

Travel expenses include GSA vehicles, mileage, per diem, and limited travel to Portland to coordinate project management with BPA.

Indirect Costs:

Indirect costs incorporated at rate of 35% per CTUIR administrative department.

Subcontractor:

Contracting includes equipment rental contracts to conduct road maintenance and habitat maintenance/enhancement activities. In addition, labor crews are included under contracting to accomplish habitat maintenance and enhancement activities such as precommercial thinning, prescribed burning, reforestation/planting/seeding, and noxious weed control.

Section 9. Key personnel

All CTUIR Department of Natural Resource staff funded under this project are professionally trained and meet standard job descriptions (professional and technical grade and series requirements) established under the CTUIR Personnel Policy and Procedures Manual (under current revision, 1998). Tribal staff involved in implementing the work identified under this proposal includes biological, technical, and administrative staff.

Name: Carl Scheeler

Title: Wildlife Program Manager Months funded this project: 1

Education: BS Wildlife, 1985, Oregon State University

Experience: 15 years fisheries/wildlife experience; 12 years CTUIR Wildlife Program

Manager; expertise in multi-project development, coordination, and oversight.

Name: Allen Childs

Title: Wildlife Biologist, Project Manager

Months funded this project: 9

Education: BS Wildlife Management 1989 Eastern Oregon State University; A.S. Natural

Resource Science/Fish and Wildlife Management 1985, College of Eastern Utah.

Experience: 13 years fisheries and wildlife biologist experience; 5 years fish and wildlife

habitat enhancement/restoration program development/management.

Name: Rob McQuary

Title: Wildlife Specialist/Resident Property Caretaker

Months funded this project: 12

Education: BS Wildlife Management, 1997. Washington State University

Experience: Habitat Enhancement/Restoration, habitat surveys

Name: CTUIR Technician Staff Title: Wildlife Technicians Months funded this project: 12

Education: Min. High School Diploma

Experience: Habitat Enhancement/Restoration, habitat surveys

Section 10. Information/technology transfer

Information transfer/exchange will be accomplished for this project through several means. First and foremost, the comprehensive management plan will be published and distributed to regional wildlife managers, project advisory committee, and other participants as well as made publicly available through local libraries and/or on the CTUIR Homepage via Internet. Likewise, the HEP Evaluation, workplan updates, etc will be made publicly available. Information exchange on the project will also occur through open public forums such as an open house and through media such as local newspapers, articles, and public announcements.

Restoration strategies employed on the project area can and will be presented to professional organization such as the Wildlife Society and Fisheries Society.

Congratulations!